

Amendment Under 37 C.F.R. §1.111
U.S. Patent Appln. No. 10/033,875

Docket No. 340-773

AMENDMENTS TO THE CLAIMS

IN THE CLAIMS

1. (Cancelled)

2. (Currently amended) Device according to claim 4, wherein said device being provided for determining the temperature of said measuring element is at least one sensor, said sensor being placed below said hotplate.

3. (Original) Device according to claim 2, wherein said device for determining the temperature of said measuring element is an infrared sensor.

4. (Currently amended) A device for determining the temperature of a cooking vessel, the cooking vessel having an underside and being placeable on a hotplate of a heating appliance, wherein at least one heating zone is defined on said hotplate and said cooking vessel is placeable on said heating zone, comprising:

at least one flat measuring element, said flat measuring element having a top surface for contact with the underside of the cooking vessel, and said flat measuring element being placed on the top of said hotplate; and

a device for determining the temperature of said measuring element,

~~device according to claim 1,~~ wherein said at least one ~~said~~ measuring element is formed by a material coating applied in a self-adhesive manner to said top of said hotplate.

5. (Currently amended) Device according to claim 4, wherein said material coating is being constituted by a printed-on ~~colour~~ color coating.

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1 6. (Currently amended) A device for determining the temperature of a
2 cooking vessel, the cooking vessel having an underside and being placeable on a
3 hotplate of a heating appliance, wherein at least one heating zone is defined on
4 said hotplate and said cooking vessel is placeable on said heating zone,
5 comprising:

6 at least one flat measuring element, said flat measuring element having a
7 top surface for contact with the underside of the cooking vessel, and said flat
8 measuring element being placed on the top of said hotplate; and

9 a device for determining the temperature of said measuring element,

10 Device according to claim 1, wherein said at least one said measuring
11 element is formed by a separate and thin material portion being fixed to said top
12 of said hotplate.

1 7. (Original) Device according to claim 6, wherein said measuring element
2 is a metal foil.

1 8. (Original) Device according to claim 6, wherein said measuring element
2 is bonded to said top of said hotplate.

9. (Cancelled)

1 10. (Currently amended) Device according to claim 9 4, wherein said top
2 surface of said measuring element projects between 0.05 and 0.15 mm over said
3 top of said hotplate.

1 11. (Currently amended) A device for determining the temperature of a
2 cooking vessel, the cooking vessel having an underside and being placeable on a
3 hotplate of a heating appliance, wherein at least one heating zone is defined on
4 said hotplate and said cooking vessel is placeable on said heating zone,
5 comprising:

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6 at least one flat measuring element, said flat measuring element having a
7 top surface for contact with the underside of the cooking vessel, and said flat
8 measuring element being placed on the top of said hotplate; and

9 a device for determining the temperature of said measuring element.

10 Device according to claim 1, wherein several measuring elements are
11 provided in said the vicinity of said heating zone are provided several measuring
12 elements.

13
1 12. (Currently amended) Device according to claim 11, wherein three said
2 measuring elements are provided in the said vicinity of said heating zone are
3 provided three said measuring elements in a triangular arrangement.

1 13. (Currently amended) A device for determining the temperature of a
2 cooking vessel, the cooking vessel having an underside and being placeable on a
3 hotplate of a heating appliance, wherein at least one heating zone is defined on
4 said hotplate and said cooking vessel is placeable on said heating zone,
5 comprising:

6 at least one flat measuring element, said flat measuring element having a
7 top surface for contact with the underside of the cooking vessel, and said flat
8 measuring element being placed on the top of said hotplate; and

9 a device for determining the temperature of said measuring element.

10 Device according to claim 1, wherein said cooking heating zone has a
11 centre center and said at least one said measuring element is positioned
12 eccentrically to said centre center.

1 14. (Currently amended) A device for determining the temperature of a
2 cooking vessel, the cooking vessel having an underside and being placeable on a
3 hotplate of a heating appliance, wherein at least one heating zone is defined on
4 said hotplate and said cooking vessel is placeable on said heating zone,
5 comprising:

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6 at least one flat measuring element, said flat measuring element having a
7 top surface for contact with the underside of the cooking vessel, and said flat
8 measuring element being placed on the top of said hotplate; and

9 a device for determining the temperature of said measuring element.

10 Device according to claim 1, wherein said cooking heating zone has a
11 centre center and none of said at least one measuring elements is positioned in
12 said centre center.

1 15. (Currently amended) Device according to claim 4 4, wherein said
2 measuring element is at least partially made of a good heat conducting material
3 with a low heat capacity.

16-17. (Cancelled)

1 18. (Currently amended) An electric heating appliance with having a
2 hotplate, with at least one heating zone defined on said hotplate being defined at
3 least one heating zone, said heating zone being heatable by a heating device,
4 and said heating device being positioned below said hotplate, said electric
5 heating appliance further including a device for determining the temperature of a
6 cooking vessel being placed on said heating zone, wherein said device for
7 determining the temperature of said cooking vessel is constructed in accordance
8 with claim 4 4.

19. (Cancelled)

1 20. (Currently amended) A method for determining the temperature of a
2 cooking vessel being placed on a hotplate of a heating appliance, wherein at least
3 one heating zone is defined on said hotplate being defined at least one heating
4 zone, said cooking vessel having an underside and with said underside being
5 placed on said heating zone, wherein the method comprises the following steps
6 are provided:

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7 ~~provision of providing~~ at least one flat measuring element on said heating
8 zone for contact with said underside of said cooking vessel, said flat measuring
9 element having a top surface;

10 setting down said cooking vessel on said heating zone in such a way that
11 said underside of said cooking vessel comes into contact with said top of said
12 measuring element; and

13 determination of the temperature of said measuring element,
14 wherein said at least one measuring element is formed by a separate and
15 thin material portion fixed to said top of said hotplate.

1 21. (Currently amended) Method according to claim 20, wherein said
2 temperature of said measuring element is being measured from below and
3 through said hotplate.

1 22. (Currently amended) Method according to claim 21, wherein said
2 measuring element has an underside, said underside emitting heat radiation, said
3 heat radiation being emitted through said hotplate, said heat radiation being
4 measured and from this measurement said temperature of said measuring
5 element is being determined.

1 23. (New) Device according to claim 6, wherein said device for
2 determining the temperature of said measuring element is at least one sensor,
3 said sensor being placed below said hotplate.

1 24. (New) Device according to claim 23, wherein said device for
2 determining the temperature of said measuring element is an infrared sensor.

1 25. (New) Device according to claim 6, wherein said top surface of said
2 measuring element projects between 0.05 and 0.15 mm over said top of said
3 hotplate.

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1 26 (New) Device according to claim 6, wherein several measuring
2 elements are provided in the vicinity of said heating zone.

1 27 (New) Device according to claim 6, wherein said measuring element is
2 at least partially made of a good heat conducting material with a low heat
3 capacity.

1 28 (New) Device according to claim 6, wherein said hotplate is at least
2 partially made of a material with a good radiation transparency for infrared
3 radiation, said infrared radiation at least ranging from a temperature range
4 between room temperature and approximately 250°C to 300°C.

1 29 (New) An electric heating appliance having a hotplate, with at least one
2 heating zone defined on said hotplate, said heating zone being heatable by a
3 heating device, and said heating device being positioned below said hotplate,
4 said electric heating appliance further including a device for determining the
5 temperature of a cooking vessel placed on said heating zone, wherein said
6 device for determining the temperature of said cooking vessel is constructed in
7 accordance with claim 6.

1 30 (New) Device according to claim 11, wherein said device for
2 determining the temperature of said measuring element is at least one sensor,
3 said sensor being placed below said hotplate.

1 31 (New) Device according to claim 30, wherein said device for
2 determining the temperature of said measuring element is an infrared sensor.

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1 32. (New) Device according to claim 11, wherein said at least one
2 measuring element is formed by a material coating applied in a self-adhesive
3 manner to said top of said hotplate.

1 33. (New) Device according to claim 32, wherein said material coating is
2 constituted by a printed-on color coating.

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1 34. (New) Device according to claim 11, wherein said at least one
2 measuring element is formed by a separate and thin material portion fixed to said
3 top of said hotplate.

1 35. (New) Device according to claim 34, wherein said measuring element
2 is a metal foil.

1 36. (New) Device according to claim 34, wherein said measuring element
2 is bonded to said top of said hotplate.

1 37. (New) Device according to claim 11, wherein said heating zone has a
2 center and at least one said measuring element is positioned eccentrically to said
3 center.

1 38. (New) Device according to claim 11, wherein said heating zone has a
2 center and none of said at least one measuring elements is positioned in said
3 center.

1 39. (New) Device according to claim 11, wherein said measuring element
2 is at least partially made of a good heat conducting material with a low heat
3 capacity.

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1 40. (New) An electric heating appliance having a hotplate, with at least
2 one heating zone defined on said hotplate, said heating zone being heatable by a
3 heating device, and said heating device being positioned below said hotplate,
4 said electric heating appliance further including a device for determining the
5 temperature of a cooking vessel placed on said heating zone, wherein said
6 device for determining the temperature of said cooking vessel is constructed in
7 accordance with claim 11.

1 41. (New) Device according to claim 13, wherein said device for
2 determining the temperature of said measuring element is at least one sensor,
3 said sensor being placed below said hotplate.

1 42. (New) Device according to claim 41, wherein said device for
2 determining the temperature of said measuring element is an infrared sensor.

1 43. (New) Device according to claim 13, wherein said at least one
2 measuring element is formed by a material coating applied in a self-adhesive
3 manner to said top of said hotplate.

1 44. (New) Device according to claim 43, wherein said material coating is
2 constituted by a printed-on color coating.

1 45. (New) Device according to claim 13, wherein several measuring
2 elements are provided in the vicinity of said heating zone.

1 46. (New) Device according to claim 45, wherein three said measuring
2 elements are provided in the vicinity of said heating zone in a triangular
3 arrangement.

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1 47. (New) Device according to claim 13, wher in none of said at least one
2 measuring elements is positioned in said center.

1 48. (New) Device according to claim 13, wherein said measuring element
2 is at least partially made of a good heat conducting material with a low heat
3 capacity.

1 49. (New) An electric heating appliance having a hotplate, with at least
2 one heating zone defined on said hotplate, said heating zone being heatable by a
3 heating device, and said heating device being positioned below said hotplate,
4 said electric heating appliance further including a device for determining the
5 temperature of a cooking vessel placed on said heating zone, wherein said
6 device for determining the temperature of said cooking vessel is constructed in
7 accordance with claim 13.

1 50. (New) Device according to claim 14, wherein said device for
2 determining the temperature of said measuring element is at least one sensor,
3 said sensor being placed below said hotplate.

1 51. (New) Device according to claim 50, wherein said device for
2 determining the temperature of said measuring element is an infrared sensor.

1 52. (New) Device according to claim 14, wherein said at least one
2 measuring element is formed by a material coating applied in a self-adhesive
3 manner to said top of said hotplate.

1 53. (New) Device according to claim 52, wherein said material coating is
2 constituted by a printed-on color coating.

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1 54. (New) Device according to claim 14, wherein said at least one
2 measuring element is formed by a separate and thin material portion fixed to said
3 top of said hotplate.

1 55. (New) Device according to claim 14, wherein several measuring
2 elements are provided in the vicinity of said heating zone.

1 56. (New) Device according to claim 55, wherein three said measuring
2 elements are provided in the vicinity of said heating zone in a triangular
3 arrangement.

1 57. (New) Device according to claim 14, wherein said measuring element
2 is at least partially made of a good heat conducting material with a low heat
3 capacity.

1 58. (New) A method for determining the temperature of a cooking vessel
2 placed on a hotplate of a heating appliance, wherein at least one heating zone is
3 defined on said hotplate, said cooking vessel having an underside and with said
4 underside being placed on said heating zone, wherein the method comprises the
5 following steps:

6 providing at least one flat measuring element on said heating zone for
7 contact with said underside of said cooking vessel, said flat measuring element
8 having a top surface;

9 setting down said cooking vessel on said heating zone in such a way that
10 said underside of said cooking vessel comes into contact with said top of said
11 measuring element; and

12 determination of the temperature of said measuring element,

13 wherein several measuring elements are provided in the vicinity of said
14 heating zone.

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1 59. (N w) Method according to claim 58, wherein said temperature of said
2 measuring element is measured from below and through said hotplate.

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1 60. (New) Method according to claim 59, wherein said measuring element
2 has an underside, said underside emitting heat radiation, said heat radiation
3 being emitted through said hotplate, said heat radiation being measured and from
4 this measurement said temperature of said measuring element is determined.
